### **WILLIAM F. GILREATH**

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#### **Profile**

I am a multifaceted software engineer, web developer, and computer scientist. I love working with software especially developing, testing, writing, and analyzing code. In my spare time, I write both code, technical papers, and narrative prose.

#### **Experience**

Unemployed/Free Agent — Salem, OR July 2019-current

I'm a multifaceted, versatile software engineer. Two open-source projects I have created on my own are:

- WEJAC simpler Java compiler. https://wgilreath.github.io/WEJAC/
- DBXShell DropBox shell to manage DropBox storage. https://wgilreath.github.io/DBXShell/

Technical Contributor/Review Editor, Packt Publications (remote work) — Salem, OR January 2019-July 2019

- Technical Contributor "Java Data Structures and Algorithms" lesson technical assessment questions.
- Technical Contributor "Java Fundamentals" pre- and post-assessment technical assessment questions.
- Technical Contributor "Java Fundamentals" lesson 1 and 2 follow-up technical assessment questions.
- Review Editor "Professional Javascript" checking, evaluation, and testing of technical content and source code.

Program Member/Volunteer, Union Gospel Mission — Salem, OR September 2015-September 2018

I became homeless thus lived at the Union Gospel Mission, in a program to get back on my feet. I graduated from this program, so am now an active job seeker. I volunteered in computer support:

- Graduate of the New Life Fellowship (NLF) program to recover from homelessness.
- · Computer support for front-desk, computer laboratory, staff computers.
- · Developed web app to e-mail evaluations from form to staff.
- Created documents, spreadsheets used by staff in Microsoft Office.

Freelance Software Developer — Picayune, MS November 2006-May 2014

I was my mother's caregiver during her declining years until her death. On the side, I worked software gigs, and odd programming jobs through word of mouth, sologig, etc.

- Worked on small software projects, gig to gig; unemployed between gigs.
- Porting legacy code to more modern languages such as FORTRAN, Pascal to Java, C#.
- Implementing custom programs, tools, and utilities for the macOS, Windows, Linux.

## Software/Database Engineer, Planning Systems, Inc. — Stennis Space Center, MS June 2006-November 2006

- Administration of information on MySQL database of sensor/buoy data on Linux server system.
- Developed and maintained Java application library for database management utilizing JDBC database driver.
- Wrote data population application with Java and shell scripts to import and export raw data from the database system.
- Assisted in improvement and verification of documentation presented on the intranet used by other scientists and software developers.
- Consulted in the development of a XML-based message software service project in Java.

## Independent Technical Author, Kluwer/Springer-Verlag — Picayune, MS March 2002-February 2003

- Lead author on computer architecture book, with Dr. Phillip A. Laplante, "Computer Architecture: A Minimalist Perspective," published March 2003.
- Researched the technical material relating to computer architecture and engineering for the text.
- Created tables, diagrams, and visual aids for book chapters illustrating concepts and principles relating to computer architecture.
- Developed chapter questions and exercises as means to assess level of understanding and comprehension of material.
- Created example programs in C programming language, assembly language to demonstrate computer architecture principles.

### Java Consultant/Developer, J.R. Simplot Company — Boise, ID February 2002-June 2002

- · Mentored software engineers by hands-on training with Java and the object-oriented paradigm.
- Rewrote and translated existing code to Java for several in house applications.
- Developed in conjunction with other developers a Java applet for interactive data visualization.
- Authored reference documentation for training and education with Java and the object-oriented paradigm using UML.

# Firmware/Software Developer, Hewlett Packard/Adecco Technical — Boise, ID March 2001-February 2002

- Install/webmaster of Apache Tomcat web server usage and development of internal web apps, tools, and utilities.
- Build printer firmware and debug failed builds on a distributed build system using C/C++.
- Investigate and assist in debugging scripts, utilities, and tools in C/C++, UNIX shell, Perl script, and JavaScript.
- Worked and developed embedded C source as part of printer firmware development kit.
- Development of HTML forms, web pages, CGI scripts, JavaScript libraries for web apps and tools.
- Maintenance, testing of software document and development tools in C/C++ in UNIX.
- · Provided support for libraries and scripts for distributed build system.

### Software Engineer, Micron Technology — Boise, ID June 1999-November 2000

- Developer for manufacturing data communication system and internal middleware library using TCP/ IP and UDP protocols in C++ for Unix/Windows.
- · Developed and assisted in database development on Oracle, Sybase in PL/SQL and Transact SQL.
- Code maintenance, revision and support for existing legacy software in C/C++ on Windows, UNIX systems.
- Assisted in assessing and planning requirements for application programming interfaces relating to SOAP and XML based software.
- Developed regression test suites for software applications and utilities in C++ using distributed middleware messaging.

- Instructor for introductory class in XML and XML application library in C++.
- Developed, debugged, documented, and maintained XML parser in C++
- Maintain and update C/C++ server software running on Windows NT platform as service.

## Lead Research Assistant, Computer Science Dept, Mississippi State — Starkville, MS July 1996-December 1996

- Led research project with professor in machine learning project for military application.
- Developed, tested, and maintained C/C++ code for machine learning app.
- Modified source code for Improvements in runtime performance, memory usage, and removal leaks.
- · Ported source code from SunOS/Unix engineering workstation to Linux on PC.
- · Coordinate research efforts with other researchers and reported to professor.

## Engineer Intern/Coop Student, South Mississippi Electric Power Association — Purvis MS August 1991-May 1994

- · Investigated alternative equipment, hardware for new replacement systems in plant equipment.
- Tested new work order/equipment schedule and tracking system.
- Edited user manual explaining use of new work order/equipment schedule system in Oracle.
- Trained and assisted users of new UNIX-based distributed control system.
- Provided computer and technical support for various software/hardware issues.

#### Education

Mississippi State University, Starkville, MS — Bachelor's of Computer Science, 1998.

#### **External Links**

LinkedIn: https://www.linkedin.com/in/wfgilreath/

GitHub: https://github.com/wgilreath

Portfolio: https://wgilreath.github.io/WillHome.html

Stack Overflow: https://stackoverflow.com/users/9205432/william-gilreath

Super-Search: https://wgilreath.github.io/sequrama.html

#### **Skills**

Java	Eclipse	SQL	MacOS
C/C++	Netbeans	PL/SQL	Linux
Shell Scripting	Visual Studio/Code	T/SQL	Windows
C#	XCode	CVS	SVN
ClearCase	Oracle	MySQL	Sybase
Git/GitHub	Shell Scripting	Python	IntelliJ
Apache Tomcat	Apache web server/HTTP	XML/SOAP	JSON